2015

The Five Hundred and Twenty-First Report of the Curricular Affairs Committee: Change to Degree and Creation of Subplans for Plant Science.

University of Rhode Island Faculty Senate

THE
UNIVERSITY
OF RHODE ISLAND
FACULTY SENATE OFFICE
Green Hall, 35 Campus Avenue, Kingston, RI 02881 USA p: 401.874.2616

THINK BIG WE DO

Serial Number #14-15—19C

TO: President David Dooley
FROM: Bahram Nassersharif, Chairperson of the Faculty Senate

1. The attached BILL titled, The Five Hundred and Twenty-First Report of the Curricular Affairs Committee: Change to Degree and Creation of Subplans for Plant Science is forwarded for your consideration.

2. This BILL was adopted by vote of the Faculty Senate on February 19, 2015.

3. After considering this bill, will you please indicate your approval or disapproval. Return the original, completing the appropriate endorsement below.

4. In accordance with Section 10, paragraph 4 of the Senate's By-Laws, this bill will become effective March 12, 2015 three weeks after Senate approval, unless: (1) specific dates for implementation are written into the bill; (2) you return it disapproved; or (3) the University Faculty petitions for a referendum.

Bahram Nassersharif
Chairperson of the Faculty Senate

February 20, 2015

ENDORSEMENT

TO: Chairperson of the Faculty Senate

FROM: President of the University

a. Approved ____.

b. Approved subject to Notice to the Board of Education ✓. Approved 5/6/15

c. Approved subject to final approval by Board of Education ____.

d. Disapproved ____.

Signature of the President

3.3.15
(date)

THE
UNIVERSITY
OF RHODE ISLAND

THINK BIG WE DO

Academic Program Proposal Cover Page

1. Name/Contact Information: Nathaniel Mitkowski

2. Originating from (please fill in all that apply):

Plant Sciences & Entomology (Department) Environment and Life Sciences (School/College) (Division)

3. Program type: Undergraduate ☑ (attach Curriculum Sheet) Graduate ☐ (attach List of Requirements)

4. Proposing **New** ☐ or **Change** ☑ to the following (see **Instructions** for definitions): (select all that apply)

Department: ☐ Degree: ☑ Program: ☐ Major: ☐ Sub plan: ☑ (option, track, concentration) Other: ☐

Title/name of proposed Department:

Title/name of proposed Degree: Plant Sciences (change from Environmental Hort. and Turfgrass Management)

Title/name of proposed Program:

Title/name of proposed Major:

Classification of instruction program (CIP) code: CIP Index 01.0607, 01.0603, 01.0304

Title/name of proposed Sub plan: 1. Turfgrass Management 2. Ornamental Horticulture 3. Sustainable Crop Production

CIP code (if different from above): CIP Index

Other:

5. Proposed Degree(s) (BS, BA, BFA, MA, MS, Ph.D, etc.): BS

6. Intended initiation date: Term Fall Year 2015

7. Anticipated date of granting first degree: May 2016

8. Intended location of program: Kingston ☑ Providence ☐ Narragansett Bay Campus ☐

9. Total Credits Required for Graduation: (120, 130, etc) 120

10. Certification/Licensing Requirements: Yes ☐ (provide brief description) No ☑

Office Use Only:

College Curriculum Committee _____ **Curricular Affairs Committee** _____ **Graduate Council** _____

Faculty Senate _____ **President** _____ **RIBGHE** _____ **Enrollment Services** _____

THE
UNIVERSITY
OF RHODE ISLAND
Revised 10-2009
Notice of Change RIBGHE

Notice of Change for
Date: January 5, 2015

A. PROGRAM INFORMATION

1. Name of institution
University of Rhode Island

2. Name of department, division, school or college
Department: Plant Sciences and Entomology
College: Environment and Life Sciences

3. Intended initiation date of program change. Include anticipated date for granting first degrees or certificates, if appropriate.
Initiation date: September 2015
First degree date: May 2016

4. Intended location of the program:
Kingston Campus

5. Summary description of proposed program (not to exceed 2 pages).

Two changes to the existing program are being proposed:

1. The first piece of the proposal is to change the name of the current degree within Plant Sciences and Entomology from "Environmental Horticulture and Turfgrass Management" to "Plant Sciences". The current name of the major within the department is "Plant Sciences" and this change will allow both the major and degree to share the same name.

2. The second change is to institute three subplans or tracks within the degree: Turfgrass Management, Ornamental Horticulture and Sustainable Crop Production. Currently these three tracks are taught unofficially within the major and the proposed change would recognize them as formal subplans that would appear on a student's transcript under the degree of "Plant Sciences."

If applicable, please include the existing URI catalog language and proposed catalog language changes that relate to your request.

Old Catalog Description Follows:

The major in plant sciences, offered by the Department of Plant Sciences and

Entomology, prepares undergraduates for professional careers in the many public and private sectors of horticulture. There are three tracks in the major: environmental horticulture, sustainable agriculture, and turf grass management. Graduates of this program pursue careers ranging from landscape contractor, golf course superintendent, director of parks, botanical gardens or arboreta, garden center or floral shop proprietor, plant propagator, nursery production manager, vegetable or fruit grower, lawn service manager, horticultural therapist, or technical representative for seed, equipment, and chemical companies, to name just a few of the opportunities available. Other graduates enter graduate school and pursue careers in research and education at public and private institutions. This program has as its unifying theme the sustainable culture and use of plants for amenity or food. The sustainable agriculture track draws on courses in sustainable vegetable and fruit production, animal science and soil management, and prepares students for careers supporting sustainable farming and food systems.

Graduates can meet the standards of several certification organizations. Students in the environmental horticulture track qualify for certification with the Rhode Island Nursery and Landscape Association and the International Society for Arboriculture. Graduates of the turfgrass management track qualify for certification as turfgrass managers or turfgrass specialists with the American Registry of Certified Professionals in Agronomy, Crops, and Soils, Ltd. of the American Society of Agronomy. These same graduates also meet the requirements for registration with the Golf Course Superintendents Association of America.

The major requires a total of 120 credits: 24 credits of pre-professional natural sciences; 30 credits in concentration courses; and 15 credits of supporting electives selected from an approved course list. Many students also minor in business management.

The department manages over 50 acres of turfgrass, horticulture, and agronomy farms for teaching, research, and outreach. The C. Richard Skogley Turfgrass Center is the oldest turfgrass research/teaching program in the U.S. The department also maintains a 15,000 square foot controlled environment greenhouse complex for hands-on learning and research. These facilities are closely allied with the URI Botanical Gardens and E.P. Christopher Arboretum."

New Catalog Description Follows:

The major in Plant Sciences, offered by the Department of Plant Sciences and Entomology, prepares undergraduates for professional careers in the many public and private sectors of horticulture. After successful completion of the major, students are awarded a degree in Plant Sciences in one of three tracks: turfgrass management, ornamental horticulture or sustainable crop production. Graduates of this program pursue careers ranging from landscape contractor, golf course superintendent, director of parks, botanical gardens or arboreta, garden center or floral shop proprietor, plant propagator, nursery production manager, vegetable or fruit grower, lawn service manager or technical representative for seed, equipment, and chemical companies, to name just a few of the opportunities available. Other graduates enter graduate school and pursue careers in research and education at public and private institutions. The

unifying theme of the major is the development of sustainable culture and use of plants for amenity or food.

Graduates can meet the standards of several certification organizations. Students in the ornamental horticulture track qualify for certification with the Rhode Island Nursery and Landscape Association and the International Society for Arboriculture. Graduates of the turfgrass management track qualify for certification as turfgrass managers or turfgrass specialists with the American Registry of Certified Professionals in Agronomy, Crops, and Soils, Ltd. of the American Society of Agronomy. These same graduates also meet the requirements for registration with the Golf Course Superintendents Association of America.

The department manages over 50 acres of turfgrass, horticulture, and agronomy farms for teaching, research, and outreach. The C. Richard Skogley Turfgrass Center is the oldest turfgrass research/teaching program in the U.S. The department also maintains a 15,000 square foot controlled environment greenhouse complex for hands-on learning and research. These facilities are closely allied with the URI Botanical Gardens and E.P. Christopher Arboretum.

The Plant Sciences degree requires a total of 120 credits: 29-30 credits of pre-professional natural sciences that all majors must take including PLS 150, PLS 200, PLS 255, BIO 101, BIO 103, BIO 102, BIO 104, CHM 103, CHM 105 (or CHM 101 and CHM 102) or their equivalent; 30 credits in concentration courses; and 15 credits of supporting electives approved by a faculty advisor which are specific to the interests of the student.

Turfgrass Management Track. The turfgrass management option is intended primarily for students who are interested in managing golf courses, athletic fields, commercial turf properties, sod farms or any other facilities comprised primarily of turf. Students in this option will gain competencies in all aspects of turf production and management, with a focus on sustainable practices and integrated pest management systems. Additionally, students interested in landscape management may also fall under this option but may take slightly different concentration courses which will address some of the other aspects of managing large, heterogeneous landscape properties. These students may also take a number of classes in the Landscape Architecture program, which can fulfill their supporting electives.

In addition to the pre-professional courses all Plant Sciences majors must take, students in this track are also required to take PLS 215 and PLS 250. Turfgrass Management students are also required to take 30 credits of concentration courses and it is suggested that in earning those credits, they take PLS 306, PLS 322, PLS 341, PLS 361, PLS 390, PLS 440, PLS 442, ENT 387 and ENT 411.

Ornamental Horticulture Track. The ornamental horticulture option is intended primarily for students who are interested in nursery management, greenhouse production, the floral industry and the production and management of woody and herbaceous materials for landscapes and urban areas. Students in this option will develop a wide set of skills allowing them to work in a diverse number of industries where ornamental plant production and management are practiced. Students interested in landscape management can also select this option, instead of the turfgrass

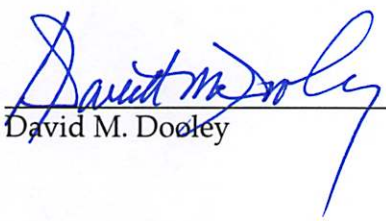
management option, if their interests are focused more on trees than on turf. As with the turfgrass management option, these students may also take Landscape Architecture classes to fulfill supporting electives.

In addition to the pre-professional courses all Plant Sciences majors must take, students in this track are also required to take PLS 215 and PLS 250. Ornamental Horticulture students are also required to take 30 credits of concentration courses and it is suggested that in earning those credits, they take PLS 301, PLS 306, PLS 331, PLS 350, PLS 353, PLS 354, ENT 385 or ENT 387 and ENT 411.

Sustainable Crop Production Track. The sustainable crop production option is intended for students with an interest in growing plants for food, managing food systems and developing sustainable approaches that minimize farming impacts on the environment while maintaining or improving the quality of food and the environment, where possible. This option does require some animal science but its primary focus is on plant systems. Students in this track will learn techniques and strategies for managing small, sustainable farming systems in addition to incorporating food production into the urban environment.

In addition to the pre-professional courses all Plant Sciences majors must take, students in this track are also required to take AVS 101, AVS 102 and AVS 132. Sustainable Crop Production students are also required to take 30 credits of concentration courses and it is suggested that in earning those credits, they take PLS 275, PLS 311, PLS 312, PLS 324, PLS 325, PLS 332, NRS 212, ENT 385 and ENT 411.

6. Signature of the President



David M. Dooley

Description of Plant Sciences Major Changes

Nathaniel Mitkowski, 10/28/2014

1. Approximately 2 years ago, the Department of Plant Sciences and Entomology requested that our major name be changed from *Environmental Horticulture and Turfgrass Management* to *Plant Sciences*. Our rationale was that our major had expanded beyond our typical mission of aesthetic crops and we were seeing a significant shift in the focus of our student base away from turf and ornamentals and into crop science and sustainable crop production.

Unfortunately, when the major name was changed to *Plant Sciences*, the degree name remained intact, listed as *Environmental Horticulture and Turfgrass Management.* Our first proposed change is to rectify this error so that both the major and the degree share the name of *Plant Sciences.*

2. At the time of the initial major name change, we foresaw implementing a number of tracks/options (as subplans) to accommodate the diversity of our students but felt it was important to institute the major change first, as this was the most contentious change and required significant discussion among the faculty.

Now that our major name has been changed, and presumably, our degree name will follow shortly, we have come to a consensus on the names and composition of the three tracks we would like to institute within *Plant Sciences.* They are as follows: 1. Turfgrass Management 2. Ornamental Horticulture and 3. Sustainable Crop Production.

An additional rational for instituting tracks within the major is so that we can more explicitly describe to students what is entailed by pursuing a degree in *Plant Sciences.* The current catalog description is woefully inadequate and makes it difficult for students to plan appropriately (they have no idea what they are really supposed to take) and it also makes it too easy for faculty to waive important classes at a whim. Surprisingly, the catalog description already mentions the existence of three separate tracks although the paperwork to officially institute them as subplans has never been submitted until now.

The current full catalog description reads:

"The major in plant sciences, offered by the Department of Plant Sciences and Entomology, prepares undergraduates for professional careers in the many public and private sectors of horticulture. There are three tracks in the major: environmental horticulture, sustainable agriculture, and turf grass management. Graduates of this program pursue careers ranging from landscape contractor, golf course superintendent, director of parks, botanical gardens or arboreta, garden center or floral shop proprietor, plant propagator, nursery production manager, vegetable or fruit grower, lawn service manager, horticultural therapist, or technical representative for seed, equipment, and chemical companies, to name just a few of the opportunities available. Other graduates enter graduate school and pursue careers in research and education at public and private institutions. This program has as its unifying theme the sustainable culture and use of plants for amenity or food. The sustainable agriculture track draws on courses in sustainable vegetable and fruit production, animal science and soil management, and prepares students for careers supporting sustainable farming and food systems.

Graduates can meet the standards of several certification organizations. Students in the environmental horticulture track qualify for certification with the Rhode Island Nursery and Landscape Association and the International Society for Arboriculture. Graduates of the turfgrass management track qualify for certification as turfgrass managers or turfgrass specialists with the American Registry of Certified Professionals in Agronomy, Crops, and Soils, Ltd. of the American Society of Agronomy. These same graduates also meet the requirements for registration with the Golf Course Superintendents Association of America.

The major requires a total of 120 credits: 24 credits of pre-professional natural sciences; 30 credits in concentration courses; and 15 credits of supporting electives selected from an approved course list. Many students also minor in business management.

The department manages over 50 acres of turfgrass, horticulture, and agronomy farms for teaching, research, and outreach. The C. Richard Skogley Turfgrass Center is the oldest turfgrass research/teaching program in the U.S. The department also maintains a 15,000 square foot controlled environment greenhouse complex for hands-on learning and research. These facilities are closely allied with the URI Botanical Gardens and E.P. Christopher Arboretum."

What follows is the catalog description we are proposing, based on the submitted checksheets included with this package (also note we have changed the Crop Production track from *Sustainable Agriculture* to *Sustainable Crop Production*, so as not to conflict with the larger Sustainable Agriculture major in process, which includes many more facets than simply plant systems):

"The major in Plant Sciences, offered by the Department of Plant Sciences and Entomology, prepares undergraduates for professional careers in the many public and private sectors of horticulture. After successful completion of the major, students are awarded a degree in Plant Sciences in one of three tracks: turfgrass management, ornamental horticulture and sustainable crop production. Graduates of this program pursue careers ranging from landscape contractor, golf course superintendent, director of parks, botanical gardens or arboreta, garden center or floral shop proprietor, plant propagator, nursery production manager, vegetable or fruit grower, lawn service manager or technical representative for seed, equipment, and chemical companies, to name just a few of the opportunities available. Other graduates enter graduate school and pursue careers in research and education at public and private institutions. The unifying theme of the major is the development of sustainable culture and use of plants for amenity or food.

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Sustainable Crop Production Track. The sustainable crop production option is intended for students with an interest in growing plants for food, managing food systems and developing sustainable approaches that minimize farming impacts on the environment while maintaining or improving the quality of food and the environment, where possible. This option does require some animal science but its primary focus is on plant systems. Students in this track will learn techniques and strategies for managing small, sustainable farming systems in addition to incorporating food production into the urban environment.

In addition to the pre-professional courses all Plant Sciences majors must take, students in this track are also required to take AVS 101, AVS 102 and AVS 132. Sustainable Crop Production students are also required to take 30 credits of concentration courses and it is suggested that in earning those credits, they take PLS 275, PLS 311, PLS 312, PLS 324, PLS 325, PLS 332, NRS 212, ENT 385 and ENT 411.

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000000PLANT SCIENCES
Sustainable Crop Production Option

000000ADVISING SHEET
Date: 1/20/15

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES

Student: **ID No.:** **Advisor:**

I. GENERAL EDUCATION (30 cr. required; 6 cr **N**atural Sciences satisfied by the major) — Cr. 0

		Cr.
A. English Communications (3+3=6)		
EC (3):		0
ECw: WRT (3)		0
B. Mathematical and Quantitative Reasoning (3)		
MQ:		0
C. Social Sciences (3+3=6)		
Recommended: EEC 105 or ECN 201; HHS 130		0
S:		0
D. Letters (3 or 6)		
L:		0
L:		0
E. Fine Arts and Literature (3 or 6)		
A:		0
A:		0
F. Foreign Language/Cross-cultural Competence (3 or 6)		
FC: Spanish recommended		0
FC:		0

Two of the courses taken as part of a student's general education program must be selected from courses designated by a "D" = Diversity

II. PRE-PROFESSIONAL & BASIC SCIENCES (29 credits required; 6+ cr. apply to GE **N**atural Sciences) — Cr. 0

		Cr.
A. Biology (8)		
Principles of Biology I (BIO101/103; 4cr)		0
Principles of Biology II (BIO102/104; 4cr)		0
B. Chemistry (4 cr)		
CHM 101/102 or 103/105 (3,1) (S/F)		0
C. Plant Sciences (10 cr)		
Introductory Horticulture (PLS150; 3cr, S/F)		0
Plant Protection (PLS200; 4cr, F)		0
Intro. Horticultural Sci. (PLS255; 3cr, S)		0
D. Animal Sciences (8 cr)		
Intro. Animal Sci. (AVS 101/102; 3,1)		0
Animal Ag. Food Pol. & Soc. (AVS 132; 3 cr. S)		0

Course Credits Required:	120
Course Credits Completed:	0

Approved for Graduation:

Advisor: _____ Date: _____

III. PROFESSIONAL CONCENTRATION *(min 21 cr)* — 0

Course Description:	Course No.	Cr.	Off:
Suggested Courses:			
Introductory Entomology	ENT 385 (3)	0	*F*
Pesticides and the Environment	ENT 411 (3)	0	*S*
Cover Crops/Pasture Manag.	PLS 275 (3)	0	*S*
Fruit Culture	PLS 311 (3)	0	*S*
Fruit Practicum	PLS 312 (2)	0	*S*
Vegetable Culture	PLS 324 (4)	0	*F*
Vegetable Practicum	PLS 325 (2)	0	*F*
Plant Pathology	PLS 332 (4)	0	*S*
Intro. to Soil Science	NRS 212 (3)	0	*S/F*
Additional Optional Courses:			
Plant Propagation	PLS 215 (4)	0	*S*
Power Units	PLS 322 (3)	0	*S*
Greenhouse Management	PLS 331 (3)	0	*Alt. S*
Weed Science	PLS 361 (3)	0	*Alt. F*
Irrigation Technology	PLS 390 (3)	0	*Alt. F*
Plant Sciences Seminar	PLS 401/402 (1)	0	*S/F*
Diseases of Turf and Ornamentals	PLS 440 (3)	0	*F*
Animal Management I	AVS 323 (3)	0	*S*
Animal Management II	AVS 324 (3)	0	*S*
Insects of Turf and Ornamentals	ENT 387 (3)	0	*F*

IV. EXPERIENTIAL LEARNING (up to 12 credits) — 0

Course Description:	Course No.	Cr.	*Off:*
Plant Sciences Internship I	PLS 399 (1-3)	0	*F, S*
Plant Sciences Internship II	PLS 399 (1-3)	0	*F, S*
Special Project/Independent Study	PLS 491 (1-3)	0	*F*
Special Project/Independent Study	PLS 492 (1-3)	0	*S*

V. ELECTIVES — 0

Course Description:	Course No.	Cr.
		0
		0
		0
		0
		0
		0
		0
		0
		0

Suggested Supporting Electives:

Anthropology of Nutrition	APG 301
Migration in the Americas	APG 415
Feeds and Feeding	AVS 212
Insect Biocontrol	ENT 519
Food Sys., Sustainability & Health	NFS 504
Soil Microbiology	NRS 426
Plant Plagues	PLS 415

plus courses in Resource Economics, Business, Aquaculture, Soil Science

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000000PLANT SCIENCES
Ornamental Horticulture Option

000000ADVISING SHEET
Date: 1/20/15

Student: ID No.: Advisor:

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES

I. GENERAL EDUCATION (30 cr. required; 6 cr Natural Sciences satisfied by the major) — Cr. 0

A. English Communications (3+3=6)
- EC (3): 0
- ECw: WRT (3) 0

B. Mathematical and Quantitative Reasoning (3)
- MQ: 0

C. Social Sciences (3+3=6)
- Recommended: EEC 105 or ECN 201 0
- S: 0

D. Letters (3 or 6)
- L: 0
- L: 0

E. Fine Arts and Literature (3 or 6)
- A: 0
- A: 0

F. Foreign Language/Cross-cultural Competence (3 or 6)
- FC: 0
- FC: 0

Two of the courses taken as part of a student's general education program must be selected from courses designated by a "D" = Diversity

II. PRE-PROFESSIONAL & BASIC SCIENCES (30 credits required or permissions of advisor, 6+ cr. apply to GE Natural Sciences) — Cr. 0

A. Biology (8)
- Principles of Biology I (BIO 101/103; 3,1cr) 0
- Principles of Biology II (BIO 102/104; 3,1cr) 0

B. Chemistry (4 cr)
- CHM 101/102 or 103/105 (3,1cr) 0

C. Plant Sciences (18 cr)
- Introductory Horticulture (PLS150; 3cr, S/F) 0
- Plant Protection (PLS200; 4cr, F) 0
- Plant Propagation (PLS215; 4cr, S) 0
- Plant Breeding & Genetics (PLS250; 4cr, S) 0
- Intro. Horticultural Sci. (PLS255; 3cr, S) 0

Course Credits Required:	120
Course Credits Completed:	0

Approved for Graduation:

Advisor: _____ Date: _____

III. PROFESSIONAL CONCENTRATION *(min 30 cr)* — 0

Course Description:	Course No.	Cr.	*Off:*
Suggested Courses:			
Insects of Turf and Ornamentals	ENT 387 (3)	0	*F*
or Introductory Entomology	ENT 385 (3)	0	*F*
Pesticides and the Environment	ENT 411 (3)	0	*S*
Nursery Crop Production	PLS 301 (3)	0	*Alt. S*
Landscape Management	PLS 306 (4)	0	*F*
Greenhouse Management	PLS 331 (4)	0	*Alt. F*
Herbaceous Garden Plants	PLS 350 (3)	0	*F*
Landscape Plants I	PLS 353 (3)	0	*F*
Landscape Plants II	PLS 354 (3)	0	*S*
Additional Optional Courses:			
Fruit Culture	PLS 311 (3)	0	*S*
Fruit Culture Practicum	PLS 312X (2)	0	*S*
Landscape Design	PLS 320 (3)	0	*Alt. F*
Power Units	PLS 322 (3)	0	*S*
Plant Pathology	PLS 332 (4)	0	*F*
Vegetable Culture	PLS 324 (4)	0	*F*
Weed Science	PLS 361 (3)	0	*F*
Irrigation Technology	PLS 390 (3)	0	*F*
Plant Sciences Seminar I	PLS 401 (1)	0	*F*
Plant Sciences Seminar II	PLS 402 (1)	0	*S*
Plant Plagues	PLS 415 (2)	0	*S*
Plant Sciences Seminar II	PLS 402 (1)	0	*S*
Diseases of Turf and Ornamentals	PLS 440 (3)	0	*F*
Advanced Turf Management	PLS 442 (3)	0	*S*
Plant Improvement	PLS 471 (4)	0	*F*

IV. EXPERIENTIAL LEARNING (up to 12 credits) — 0

Course Description:	Course No.	Cr.	*Off:*
Plant Sciences Internship I	PLS 399 (1-3)	0	*F, S*
Plant Sciences Internship II	PLS 399 (1-3)	0	*F, S*
Special Project/Independent Study	PLS 491 (1-3)	0	*F*
Special Project/Independent Study	PLS 492 (1-3)	0	*S*

V. ELECTIVES (up to 18 credits) — 0

Course Description:	Course No.	Cr.
		0
		0
		0
		0
		0
		0
		0
		0
		0

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000000PLANT SCIENCES
Turfgrass Management Option

000000ADVISING SHEET
Date: 1/20/15

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES

Student: **ID No.:** **Advisor:**

I. GENERAL EDUCATION (30 cr. required; 6 cr **N**atural Sciences satisfied by the major) — Cr. 0

A. English Communications (3+3=6)
- EC (3): _____ 0
- ECw: WRT (3) _____ 0

B. Mathematical and Quantitative Reasoning (3)
- MQ: _____ 0

C. Social Sciences (3+3=6)
- Recommended: EEC 105 or ECN 201 _____ 0
- S: _____ 0

D. Letters (3 or 6)
- L: _____ 0
- L: _____ 0

E. Fine Arts and Literature (3 or 6)
- A: _____ 0
- A: _____ 0

F. Foreign Language/Cross-cultural Competence (3 or 6)
- FC: _____ 0
- FC: _____ 0

Two of the courses taken as part of a student's general education program must be selected from courses designated by a "D" = Diversity

II. PRE-PROFESSIONAL & BASIC SCIENCES — Cr. 0

(30 credits required or permissions of advisor, 6+ cr. apply to GE Natural Sciences)

B. Biology (8)
- Principles of Biology I (BIO 101/103; 3,1cr) _____ 0
- Principles of Biology II (BIO 102/104; 3,1cr) _____ 0

C. Chemistry (4 cr)
- CHM 101/102 or 103/105 (3,1cr) _____ 0

D. Plant Sciences (18 cr)
- Introductory Horticulture (PLS150; 3cr, S/F) _____ 0
- Plant Protection (PLS200; 4cr, F) _____ 0
- Plant Propagation (PLS215; 4cr, S) _____ 0
- Plant Breeding & Genetics (PLS250; 4cr, S) _____ 0
- Intro. Horticultural Sci. (PLS255; 3cr, S) _____ 0

Course Credits Required:	120
Course Credits Completed:	0

Approved for Graduation:

Advisor: _____ Date: _____

III. PROFESSIONAL CONCENTRATION *(min 30 cr)* — 0

Course Description:	Course No.	Cr.	*Off:*
Suggested Courses:			
Insects of Turf and Ornamentals	ENT 387 (3)	0	*F*
Pesticides and the Environment	ENT 411 (3)	0	*S*
Landscape Management	PLS 306 (4)	0	*F*
Power Units	PLS 322 (3)	0	*S*
Intro. Turf Management	PLS 341 (3)	0	*F*
Weed Science	PLS 361 (3)	0	*F*
Irrigation Technology	PLS 390 (3)	0	*F*
Diseases of Turf and Ornamentals	PLS 440 (3)	0	*F*
Advanced Turf Management	PLS 442 (3)	0	*S*
Additional Optional Courses:			
Nursery Crop Production	PLS 301 (3)	0	*Alt. S*
Vegetable Practicum	PLS 325 (2)	0	
Greenhouse Management	PLS 331 (4)	0	*Alt. F*
Plant Pathology	PLS 332 (4)	0	
Herbaceous Garden Plants	PLS 350 (3)	0	*F*
Landscape Plants I	PLS 353 (3)	0	*F*
Landscape Plants II	PLS 354 (3)	0	*S*
Fruit Culture	PLS 311 (3)	0	*S*
Fruit Culture Practicum	PLS 312 (2)	0	*S*
Landscape Design	PLS 320 (3)	0	*Alt. F*
Vegetable Culture	PLS 324 (4)	0	*F*
Plant Sciences Seminar I	PLS 401 (1)	0	*F*
Plant Sciences Seminar II	PLS 402 (1)	0	*S*
Plant Plagues	PLS 415 (2)	0	*S*

IV. EXPERIENTIAL LEARNING (up to 12 credits) — 0

Course Description:	Course No.	Cr.	*Off:*
Plant Sciences Internship I	PLS 399 (1-3)	0	*F, S*
Plant Sciences Internship II	PLS 399 (1-3)	0	*F, S*
Special Project/Independent Study	PLS 491 (1-3)	0	*F*
Special Project/Independent Study	PLS 492 (1-3)	0	*S*

V. ELECTIVES (up to 18 credits) — 0

Course Description:	Course No.	Cr.
		0
		0
		0
		0
		0
		0
		0
		0
		0